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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

GRND-24C

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on August 22 2007

Signature

Typed or printed name Carol Boultinghouse

Application Number

10/602,666

Filed

June 25, 2003

First Named Inventor

Ford Oxaal

Art Unit

2628

Examiner

Yang, Ryan R.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

 applicant/inventor. assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

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Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.

 \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**COMES NOW** the Applicant, by and through undersigned representative, and respectfully requests a Pre-Brief Conference in the above-entitled matter, based on errors of fact and law in the Office Actions, and as grounds heretofore asserts:

- 1) the rejection of Claims 17-22 under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement is factual error; and
- 2) the rejection of claim 1 under 35 USC 102 is legal and factual error.

**I. The Rejection of Claims 17-22 under 35 U.S.C. § 112 is An Error of Fact**

**A. Applicant's Specification Adequately Supports Claims 17-21**

In rejecting claims 17-21 under this code section, the Office Action asserts that "the specification does not disclose the p-surface is comprised of one or more polygons."

Dependent Claims 17-21 recite, respectively,:

17. The method of claim 1, wherein the p-surface comprises polygons approximating a partial sphere.
18. The method of claim 1, wherein the p-surface comprises one or more polygons such that there exists a half-space for each polygon, and wherein the intersection of all such half-spaces includes at least one point in common.
19. The method of claim 18, wherein a point is within the p-surface if it is included in the intersection.
20. The method of claim 1, wherein the p-surface comprises one or more polygons, and wherein a point is within the p-surface if it is included in the union of a given set of half-planes, wherein the set includes no more than one half-plane per polygon.
21. The method of claim 1, wherein the p-surface comprises one or more polygons, and wherein a point is within the p-surface if it is included in the intersection of a given set of half-planes, wherein the set includes no more than one half-plane per polygon.

Turning to Applicant's specification, it must be noted that paragraph [0036], page 12 provides a definition of a P-Surface and further provides evidence of P-Surfaces that are comprised of one or more polygons:

P-Surface: a computer graphics representation of any surface with a well-defined inside and outside, where there exists at least one point x inside (neither intersecting, nor lying outside) the surface which may be connected to every point of the surface with a distinct

line segment, no portion of which said line segment lies outside the surface or intersects the surface at a point not an endpoint. The union of all such points x form the region X of the p-surface. For a convex p-surface, the region X is all points of the interior of the p-surface. **Examples of computer graphics objects which may be modeled as p-surfaces: tetrahedron, cube, sphere, ellipsoid, cylinder, apple torus, lemon torus, b-spline surfaces closed or periodic in u and v.** A p-sphere is a p-surface. (emphasis added).

Examples of P-Surfaces listed that are considered polygons, by definition, are, for example, a tetrahedron and a cube. Moreover, it is well-recognized that the written description requirement is satisfied by disclosure of descriptive means such as formulas, words, structures, figures, and diagram. Enzo Biochem Inc. v. Gen-Probe, 285 F.3d 1013, 62 USPQ2d 1609, 1617 (Fed. Cir. 2002) (“[W]e clarified that the written description requirement is satisfied by the patentee’s disclosure of such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention.”). Here, where Applicant has provided a definition of P-Surface and provided specific examples of polygonal structures for the P-Surface in the specification, no further evidence or showing should be required to satisfy the written description requirement of 35 U.S.C. 112, first paragraph. Based on the evidence, Applicant contends that Applicant’s specification provides support for Claims 17-21 and does disclose that the p-surface is comprised of one or more polygons.

#### **B. Applicant’s Specification Adequately Supports Claim 22**

In rejecting claim 22 under 35 U.S.C. § 112, first paragraph, the Office Action asserts that “the specification does not disclose the full-surround data is a sample of incoming image data.”

Dependent Claim 22 recites:

22. The method of claim 1, wherein the full-surround image data is a sample of incoming image data.

Applicant’s specification at paragraph [0036], page 11, provides a definition of full-surround image data. It states:

FULL-SURROUND IMAGE DATA: **data which samples the points P.** This data encodes, explicitly or implicitly, the association of a color value with a given direction from a given point of projection. It should be mentioned at this point that **full-surround image data is useful in many fields of entertainment because, when delivered to many viewers, it enables the construction of an independent viewing system defined below.** (*emphasis added*).

“The points P” is defined in Applicant’s specification at paragraph [0036], page 11:  
POINTS P: The visible world.

The full-surround image data that is delivered to viewers, as provided by definition, *supra*, would necessarily be incoming data. Based on the Applicant’s specification definitions of **Full-Surround Image Data** and **Points P**, it should be explicitly, or at least implicitly clear to one of ordinary skill in the art, that Full-Surround Image Data is, by definition, a sample of incoming image data as recited by Claim 22. Accordingly, Applicant contends that Applicant’s specification provides support for Claim 22. Therefore, Applicant’s specification sufficiently satisfies the written description requirement of 35 U.S.C. 112, first paragraph.

## **II. The Rejection of Claims 1 Under 35 U.S.C. § 102 is An Error of Law And Fact**

The Office Action asserts that Claim 1 is rejected under 35 U.S.C. 102 as being anticipated by Chiang et al. (“Chiang”), U.S. 6,028,584. Claim 1 recites:

A method of modeling of the visible world **using full-surround image data**, said method comprising:

selecting a view point within a p-surface;  
selecting a direction of view within the p-surface;  
**texture mapping full-surround image data** onto said p-surface such that the resultant texture map is substantially equivalent to **projecting full-surround image data onto the p-surface** from said view point to thereby generate a texture mapped p-surface; and  
displaying a predetermined portion of said texture mapped p-surface. (*emphasis added*)

Applicant’s independent Claim 1 clearly requires the limitation of **full-surround data**. Chiang does not teach or fairly suggest full-surround image data. Chiang teaches panoramic image data. Yet, the

Office Action maps the limitation “texture mapping full-surround image data” by referencing Figure 2 of Chiang and states at paragraph 10 of the Office Action:

. . . **texture mapping full-surround image data** onto said p-surface such that the resultant texture map is substantially equivalent to **projecting full-surround image data onto the p-surface** from said view point to thereby generate a texture mapped p-surface (*Figure 2 is a texture mapping process where the texture map is substantially equivalent to projecting full-surround image data onto the p-surface*).

However, nothing in Chiang’s Figure 2 discloses or even suggests Applicant’s limitation of **texture mapping full-surround image data**. Furthermore, Chiang’s textual description of the Figure 2, at column 5, lines 9-61, does not even support the use of full-surround data. It supports the use of panoramic data and **panoramic data and full-surround data are not the same type of data**.

Applicant’s specification discloses that full-surround image data enables the use of an independent viewing system. An independent viewing system is an image system “in which multiple viewers can freely . . . and independently of the source of the image data, pan that image data **in all directions**.” Applicant’s specification, page 13. By contrast, Chiang discloses that a panoramic viewing system provides “**360 degrees of horizontal panning and only a limited range of vertical panning**.” Chiang, column 1, line 64 to column 2, line 5.

In response to Applicant’s traversal, the Office Action at paragraph 11 states:

[T]he “Chiang disclosure does not contradict with the claim limitations. It is noted that the features upon which applicant relies (i.e. all directions) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

But, Applicant is not using the specification to further limit the term full-surround data. Applicant is merely using the specification as a guide for interpreting the meaning of the term full-surround.

As well stated in Phillips v. AWH, 415 F.3d 1303, 75 U.S.P.Q.2d 1321 (Fed. Cir. 2005):

The claims must be read in view of the specification, of which they are a part. The specification is always highly relevant to the claim construction analysis. It [the

specification] is the single best guide to the meaning of a disputed term. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.

Furthermore, it must be noted that Applicant's discussion of "an immersive environment where a viewer is free to look in any direction" in the response to the Non-Final Office Action, was merely elaborating and clarifying the use distinction between full-surround image data as disclosed by Applicant and panoramic data as disclosed by the Chiang prior art. The prior art of Cheung teaches panoramic data and a panoramic system that has a limited viewing field. But, Applicant's Claim 1 recites the use of a totally different kind of data and system, i.e. full-surround data, which enables an unlimited viewing range.

### CONCLUSION

Based on the foregoing, Applicant asserts that the rejection under 35 U.S.C. § 112 of Claim 17-22 and the rejection of Claim 1 under 35 U.S.C. § 102 are erroneous and should be withdrawn. Applicant asserts that the application is in a condition for allowance and respectfully requests that a decision be entered to allow the application, or in the alternative, a decision be entered to reopen prosecution. We pray for this.

Respectfully submitted,  
GROOVER & HOLMES

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